

KENDRIYA VIDYALAYA No. III, RRL JORHAT

CLASS : X SUB: HINDI SUMMER VACATION HOLIDAY HOMEWORK 2022-23

कक्षा – X विषय हिन्दी	
1.	सूरदास पाठ में उद्धव के व्यवहार की तुलना किस किस से की गई है ?
2.	गोपियों के अनुसार राजा का क्या धर्म होना चाहिए ?
3.	नेताजी का चश्मा पाठ के आधार पर पानवाले का एक रेखाचित्र प्रस्तुत कीजिए।
4.	रचना के आधार पर वाक्य के कितने भेद होते हैं सभी की परिभाषा सहित चार चार उदाहरण लिखिए

KENDRIYA VIDYALAYA No. III, RRL JORHAT

CLASS : X SUB: ENGLISH SUMMER VACATION HOLIDAY HOMEWORK 2022-23

1. Read *Diary of a Young Girl* by *Anne Frank* in your vacation. Also illustrate one of your favourite scenes from that story.
2. Listen to a music programme on Radio or T.V. and write short description of the performance.
3. Interview your parents and grandparents to find out about the things / activities they used to do when they were your age. Tabulate the activities which no longer exist. Such as leisure time activities, games, customs practices, work done etc. (minimum 10 activities). Make it interesting. Your interview must have a lot of details for the readers to understand the yesteryears clearly.

KENDRIYA VIDYALAYA No. III, RRL JORHAT

CLASS : X SUB: MATHS SUMMER VACATION HOLIDAY HOMEWORK 2022-23

INSTRUCTIONS:

- Read all the questions carefully before solving. Write the solution of questions in Mathematics notebook.
- Complete the project separately on A4 sheets in neat and clear hand writing and attractive.
- Make a cover page for project mentioning your name, class and roll number clearly.

Section A (Questions)

1. Check whether $75/455$ is terminating or non-terminating decimal expansion.
2. Check whether $654.737373\dots$ is a rational number. Justify.
3. A polynomial of degree 2 is called -----polynomial. (Cubic/ quadratic/ linear)
4. $\sqrt{25}$ is a -----number. (rational/irrational)
5. Find the p/q form of $0.09999\dots$
6. Find the H.C.F. of 567 and 255 using Euclid's division lemma.
7. Find the LCM and HCF of 510 and 92 and check whether $LCM \times HCF =$ product of the given numbers .
8. Find the degree of :
(i) $6x^3 - 7x - 3$ (ii) $4x^4 - 3x^5 - 4x + 1$ (iii)
9. If $p(x) = x^3 - 3x^2 + 5x - 3$. find $p(2)$, $p(-1)$.
10. Prove that $-\sqrt{3}$ is an irrational number.
11. Prove that $2 - 7\sqrt{3}$ is an irrational number.
12. Factorize the following polynomials:

- i. $4x^2 - 3x - 1$
- ii. $3x^2 + 4x - 4$
- iii. $5t^2 + 12t + 7$

13. Prepare a table representing different solids and their names, surface areas and Volumes formulas.

Section B (project work/activities)

14. Make a project on the title “ **π - WORLD'S MOST MYSTERIOUS NUMBER**”

15. Perform following activities and write in A4 sheet:

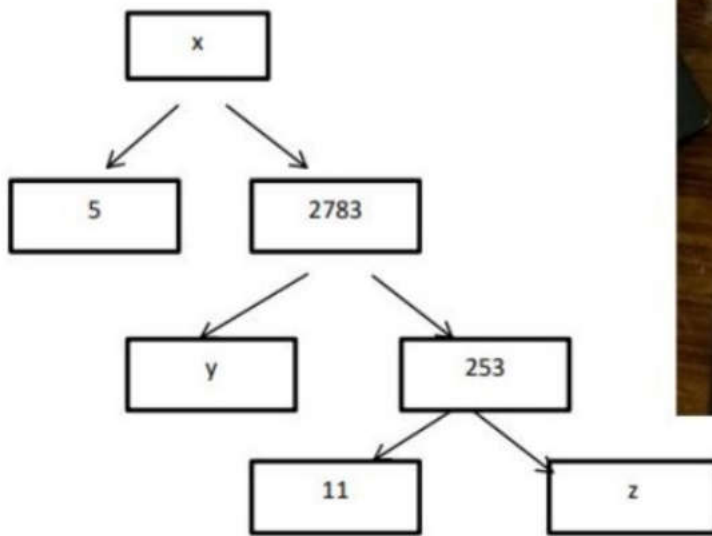
Activity 1: OBJECTIVE: To give a suggestive demonstration of the formula that the area of circle is half the product of its circumference and radius.

Activity 2: OBJECTIVE : To Derive the formula for Volume of a cube and cuboid using model and verify with example and calculation.

16. **CCT QUESTIONS**

(i) A mathematical Exhibition is being conducted in your school and one of your friends is making a model of a factor tree. He has some difficulty and ask for your help in completing a quiz for the audience. Observe the following factor tree and answer the following.

(ii)



- i. What will be the value of x?
a) 15005 b) 13915 c) 56920 d) 17429
- ii. What will be the value of y?
a) 23 b) 22 c) 11 d) 19
- iii. What will be the value of z?
a) 22 b) 23 c) 17 d) 19
- iv. According to Fundamental Theorem of Arithmetic, 13915 is a.
a) Composite number b) Prime number
c) Neither prime nor composite d) Even number
- v. The prime factorisation of 13915 is
a) $5 \times 11^3 \times 13^2$ b) $5 \times 11^3 \times 23^2$ c) $5 \times 11^2 \times 23$ d) $5 \times 11^2 \times 13^2$

Four satellites revolve around the earth once every 6, 8, 10, and 15 hr, respectively. If the satellites are initially lined up, how many hours must pass before they will again be lined up?



(iii)

The traffic lights at three different road crossings change after every 48 seconds, 72 seconds and 108 seconds respectively. If they change simultaneously at 7 AM, at what time will they change simultaneously again?



(iv)

A tile floor is to be made from 10 inch, 12 inch, and 15 inch square tiles. A design is made by alternating rows with different size tiles. The first row uses only 10 inch tiles, the second row uses only 12 inch tiles, and the third row uses only 15 inch tiles. Neglecting the grout seams, what is the shortest length of floor space that can be covered evenly by each row?



KENDRIYA VIDYALAYA No. III, RRL JORHAT

CLASS : X SUB: SCIENCE SUMMER VACATION HOLIDAY HOMEWORK 2022-23

SUBJECT: PHYSICS

1. Define
 - A) Radius of curvature
 - B) Focal length
2. Which the properties of image formation for plane mirror.
3. Write the rules for image formation in spherical mirrors? Draw ray diagrams also.
4. Define the laws of reflection .
5. Draw the ray diagrams for image formation in concave mirror (all cases) on a full chart paper.

Subject : Biology

1. How are fats digested in our bodies? Where does this process take place?
2. What is the role of saliva in the digestion of food?
3. What are the necessary conditions for autotrophic nutrition and what are its by-products?
4. What are the differences between aerobic and anaerobic respiration? Name some organisms that use the anaerobic mode of respiration.
5. How are the alveoli designed to maximise the exchange of gases?

Subject : Chemistry

Q1: Why should a magnesium ribbon be cleaned before burning in air ?

Q2: Write the balanced equation for the following chemical reactions.

(i) Hydrogen + Chlorine → Hydrogen chloride

(ii) Barium chloride + Aluminium sulphate → Barium sulphate + Aluminium chloride

(iii) Sodium + Water → Sodium hydroxide +

Q3: What does one mean by exothermic and endothermic reactions ? Give examples.

Q4: Why does the colour of copper sulphate solution change when an iron nail is dipped in it ?

Q4: Why are decomposition reactions called the opposite of combination reactions? Write equations for these reactions.

Q5: What is the difference between displacement and double displacement reactions? Write equations for these reactions.

Q6: Explain the following terms with one example each (a) Corrosion, (b) Rancidity.

Q7: Explain the following in terms of gain or loss of oxygen with two examples each:

(a) Oxidation and

(b) Reduction.

KENDRIYA VIDYALAYA No. III, RRL JORHAT

CLASS : X SUB: SOCIAL SCIENCE SUMMER VACATION HOLIDAY HOMEWORK 2022-23

- (1) What step were taken by French Revolutionaries to create a sense of collective identity amongst French people?
- (2) Write the process of German unification?
- (3) Write the process of Italian unification?
- (4) What were Marianne and Germania?
- (5) Write provisions of Napoleonic Code of 1804?
- (6) What are types of resources? Write in detail.
- (7) Write in detail about types of soil?
- (8) Classify the resources on the basis of Exhaustibility?
- (9) What is sustainable development?

PROJECT WORK

Make a project on any one of the following themes

1. Sustainable Development
2. Social issues
3. Consumer Awareness

KENDRIYA VIDYALAYA No. III, RRL JORHAT

CLASS : X SUB: SANSKRIT SUMMER VACATION HOLIDAY HOMEWORK 2022-23

1. संस्कृत भाषायाः महत्त्वं विषये लिखतु
 2. पञ्च श्लोकं लिखित्वा पठतु च कण्ठस्थं करोतु ।
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